

there could be a plurality of previously defined coupling configurations and/or settings, which may have been saved and/or named, that could be chosen to apply to the current orientation and/or configuration. In some embodiments, the previously saved and/or default configurations may specify orientations of antenna systems and/or CE devices in lining up one or more antennas available on one side of the communications with antennas available on the other side of the communications. Further, the settings may designate what signals will be sent over each communication channel.

[0107] As another example, the group controller and/or antenna system may recognize that there is an HDMI signal source available through a first CE device, that a second CE device is configured to use an HDMI signal, and that there are antennas available in antenna systems of each of the first and second CE device configured to wirelessly communicate an HDMI signal. Accordingly, the antenna systems and/or group controller might default to configure the corresponding antenna systems of the two CE devices to communicate the HDMI signal. Further, in some instances, this configuration may occur through the antenna systems without the need to be explicitly configured to do so.

[0108] Further, some embodiments may implement step **630** when the second antenna system has not been previously configured and/or associated with the first antenna system or another antenna system of the near field wireless network. In step **630**, configuration instructions can be stored, for example, in a matrix, for subsequent use upon reconfiguring the near field network and/or a change of the near field wireless network (e.g., the CE device having the second antenna system is removed from the near field wireless network and later incorporated back into the near field wireless network). In step **632**, appropriate services within first CE device **130** and/or the antenna system of the first CE device are enabled and/or disabled based on the coupling and/or coupling parameters and/or other information (e.g., functionality of the CE device), such as the information obtained in step **624**.

[0109] Process **610** or portions of the process can repeat for each antenna system detected and/or that might be incorporated into the near field wireless network. For example, following steps **628** or **632**, the process may return to step **616** to initiate the discovery process in attempts to detect one or more further antenna systems.

[0110] FIG. 7 depicts a simplified flow diagram of an exemplary process **710** of discovering one or more antenna systems and/or CE devices, in accordance with some embodiments. The process **710** may be utilized to implement one or more steps of the process **610**, in some embodiments. In step **712**, an antenna system wirelessly polls for a separate second antenna system. The polling can be substantially any polling. For example, the polling may include issuing one or more predefined communications through one or more communications antennas and/or the power antenna of the antenna system in accordance with one or more communication protocols and determining whether a corresponding predefined response is received.

[0111] In step **714**, it is determined whether a second antenna system is detected. When no separate antenna system is detected, the process may repeat step **712** one or more times. Again, the repeating may include repeating a previous communication or issuing a different communication in accordance with a different communication protocol through one or more antennas of the antenna system. When

a separate antenna system is detected, step **716** is entered to discover the functional network services. For example, PHY layer detection and/or a Link Layer protocol (e.g., UPnP) can be implemented to discover some or all the functional network services available (e.g., power sharing functionality, data sharing functionality, communications functionality, etc.). Some embodiments may include step **718** where a user is asked to establish one or more desired functional network services. For example, once services are known, the user can be asked to authorize which services are to be activated.

[0112] The discovery of another antenna system and/or the configuration of the near field wireless network may be activated by a user, may be initiated in response to a power up, may be triggered based on a schedule or expiration of a predefined period of time, or the like. For example, a user may activate an application on a CE device to initiate the antenna system discovery. As another example, the CE device may activate the antenna system discovery and/or ask the user whether it is authorized to perform an antenna system discovery. For example, an antenna system would not exchange information and/or communicate with another antenna system without permission from the user (e.g., user presses button to start discovery, user presses button, while second CE device is in “auto mode,” both devices are in “auto mode,” etc.). Similarly, the ability to establish a wireless connection with another antenna system of another CE device may be restricted based on a service authorization (e.g., there may be a service that the user needs to pay for to take advantage of this capability). As such, an antenna system may need authorization (e.g., from a service provider) before allowing the discovery and/or linking with another antenna system. Additionally or alternatively, antenna systems that were previously connected may connect automatically as part of the discovery process.

[0113] As described above, some embodiments identify one or more previous coupling configuration settings that were previously stored. The previous coupling configuration setting can define one or more prior coupling configurations, and the configuration setting is typically associated with each of multiple antenna systems based on prior wireless cooperation between at least the multiple antenna systems. As such, the configuration instructions can comprise the previous coupling configuration setting corresponding to the one or more of the prior wireless coupling configurations, which can direct at least the multiple antenna systems (e.g., first, second, and third antenna systems) to communicatively cooperate relative to each other in accordance with the previous coupling configurations setting. Additionally, in some implementations, the previous coupling configuration setting further defines an orientation and/or position of a first antenna system relative to an orientation and/or position of one or more of the multiple antenna systems.

[0114] For example, it may be determined from the wireless coupling parameters that a first antenna system, a second antenna system, and a third antenna system are in a first orientation relative to each other. It may further be determined that the first antenna system, the second antenna system, and the third antenna system had in the past been positioned in a previous orientation that is substantially the same as the first orientation. Based in part on this identified previous orientation, one or more prior wireless coupling configurations previously stored and associated with the previous orientation may be identified. As such, one or more